

WHAT IS CLAIMED IS:

- 1 1. A computer system for scheduling resources needed to perform service
2 actions, the system comprising:
 - 3 an engine that associates, based on user input, resource information with task
4 items that need to be completed as part of performing a service action; and
5 a repository of resource information associable with the task items, the repository
6 including human resource information, reusable resource information, and non-reusable
7 resource information, wherein:
 - 8 the human resource information includes availability information for
9 human resources,
 - 10 the reusable resource information includes availability information for
11 reusable resources, and
 - 12 the non-reusable resource information includes availability information for
13 non-reusable resources.
- 1 2. The system of claim 1 wherein:
 - 2 the repository includes non-resource constraint information, and
 - 3 the engine associates, based on user input and non-resource constraint
4 information, resource information with task items.
- 1 3. The system of claim 2 wherein the non-resource constraint information is
2 provided to the repository of resource information from a computer system other than the
3 computer system for scheduling resources.
- 1 4. The system of claim 2 wherein the non-resource constraint information
2 comprises information about contractual requirements.
- 1 5. The system of claim 1 wherein the availability information for human
2 resources comprises availability information for individuals.

1 6. The system of claim 1 wherein the availability information for human
2 resources comprises availability information for groups of individuals.

1 7. The system of claim 1 wherein the availability information for reusable
2 resources comprises availability information for tools.

1 8. The system of claim 1 wherein the availability information for reusable
2 resources comprises availability information for work areas.

1 9. The system of claim 1 wherein the availability information for non-
2 reusable resources comprises availability information for spare parts.

1 10. The system of claim 1 wherein:
2 the task items include a human resource skill requirement,
3 the human resource information includes a indication of a skill possessed by
4 particular human resources that are represented in the human resource information, and
5 the engine associates a particular human resource with a particular task item only
6 when the indication of the skill possessed by the particular human resource matches the
7 human resource skill requirement of the task item.

1 11. The system of claim 1 wherein:
2 the task items include a tool characteristic,
3 the reusable resource information includes an indication of a tool characteristic
4 for particular tools that are represented in the reusable resource information, and
5 the engine associates a particular tool with a particular task item only when the
6 indication of the tool characteristic for a particular tool matches the tool characteristic of
7 the task item.

1 12. The system of claim 1 wherein the availability information for human
2 resources is provided to the repository of resource information from a computer system
3 other than the computer system for scheduling resources.

1 13. The system of claim 1 wherein the availability information for reusable
2 resources is provided to the repository of resource information from a computer system
3 other than the computer system for scheduling resources.

1 14. The system of claim 1 wherein the availability information for non-
2 reusable resources is provided to the repository of resource information from a computer
3 system other than the computer system for scheduling resources.

1 15. The system of claim 1 wherein the engine and the repository of resource
2 information are capable of communicating using a network with mobile clients.

1 16. The system of claim 15 wherein the engine is configured to send, to each
2 mobile client, resource information associated with task items that need to be completed
3 as part of performing a particular service action.

1 17. The system of claim 15 wherein the engine is configured to receive, from
2 each mobile client, user input for the purpose of associating resource information with a
3 particular task item.

1 18. A data repository comprising resource information associated with task
2 items that need to be completed as part of performing a service action, the repository
3 including human resource information and reusable resource information, wherein:
4 the human resource information includes availability information for human
5 resources, and
6 the reusable resource information includes availability information for reusable
7 resources.

1 19. The data repository of claim 18 wherein:
2 the repository further comprises non-reusable resource information, and

3 the non-reusable resource information includes availability information for non-
4 reusable resources.

1 20. The data repository of claim 19 wherein the repository further comprises
2 non-resource constraint information capable of being associated with task items.

1 21. A computer-implemented method for scheduling resources needed to
2 perform service actions, the method comprising:
3 associating, based on user input, resource information with task items that need to
4 be completed as part of performing a service action; and
5 storing resource information associated with the task items, the resource
6 information including human resource information, reusable resource information, and
7 non-reusable resource information, wherein:
8 the human resource information includes availability information for
9 human resources,
10 the reusable resource information includes availability information for
11 Reusable resources, and
12 the non-reusable resource information includes availability information for
13 non-reusable resources.

1 22. The method of claim 21 further comprising:
2 storing non-resource constraint information, and
3 associating, based on user input and non-resource constraint information, resource
4 information with task items.

1 23. The method of claim 22 wherein the non-resource constraint information
2 is provided from a computer system other than a computer system used for scheduling
3 resources.

1 24. The method of claim 22 wherein the non-resource constraint information
2 comprises information about contractual requirements.

1 25. A computer-readable medium or propagated signal having embodied
2 thereon a computer program configured to schedule the performance of service actions,
3 the medium or signal comprising one or more code segments configured to:

4 associate, based on user input, resource information with task items that need to
5 be completed as part of performing a service action; and

6 store resource information associated with the task items, the resource
7 information including human resource information, reusable resource information, and
8 non-reusable resource information, wherein:

9 the human resource information includes availability information for
10 human resources,

11 the reusable resource information includes availability information for
12 reusable resources, and

13 the non-reusable resource information includes availability information for
14 non-reusable resources.

1 26. The medium or signal of claim 25 wherein the one or more code segments
2 are further configured to:

3 store non-resource constraint information, and

4 associate, based on user input and non-resource constraint information, resource
5 information with task items.

1 27. The medium or signal of claim 26 wherein the non-resource constraint
2 information is provided from a computer system other than a computer system used for
3 scheduling resources.

1 28. The medium or signal of claim 26 wherein the non-resource constraint
2 information comprises information about contractual requirements.